## **REMARKS**

The present application was filed on February 20, 2004 with claims 1-19. Claims 4-7, 10-12, 15, 16, 18 and 19 have been withdrawn.

In the outstanding Office Action dated November 29, 2006, the Examiner: (i) objected to the drawings; (ii) rejected claims 1-3, 8, 9, 13, 14 and 17 under 35 U.S.C. §101; (iii) rejected claims 1-3, 8, 9, 13, 14 and 17 under 35 U.S.C. §112, second paragraph; and (iv) rejected claims 1-3, 8, 9, 13, 14 and 17 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,706,498 to Fujimiya et al. (hereinafter "Fujimiya").

With regard to the objection to the drawings, Applicant has amended the specification to comply with the requirements of 37 C.F.R. §1.821 through §1.825. Further, Applicant has submitted a new sequence listing that is incorporated by reference into the specification since an additional sequence has been listed in the sequence listing. Applicant asserts that the information recorded in computer readable form is identical to the written sequence listing. Also, Applicant asserts that the accompanying sequence listing contains no new matter. Accordingly, withdrawal of the objection is therefore respectfully requested.

With regard to the §101 rejection of claims 1-3, 8, 9, 13, 14 and 17, independent claims 1, 8, 13 and 17 have been amended to more clearly recite usefulness and practical result of the invention. More specifically, the independent claims have been amended to recite the storing of evaluation results for use by a user in determining the binding effectiveness and reliability of a probe nucleotide sequence with a target nucleotide sequence. Support for this amendment can be found on page 4, line 17 through page 5, line 17 of the Specification. A user may be provided with information that a probe does not bind to a target nucleotide sequence with the precision that a user requires, or information regarding binding possibility, similarity, and a corresponding subsequence if there is a binding possibility within an acceptable range. Accordingly, withdrawal of the rejection of claims 1-3, 8, 9, 13, 14 and 17 under 35 U.S.C. §101 is therefore respectfully requested.

With regard to the rejection of claims 1-3, 8, 9, 13, 14 and 17 under 35 U.S.C. §112, second paragraph, the claims have been amended to more clearly point out and distinctly claim the subject

matter which the applicant regards as the invention. Accordingly, withdrawal of the rejection of claims 1-3, 8, 9, 13, 14 and 17 under 35 U.S.C. §112 is therefore respectfully requested.

With regard to the rejection of claims 1-3, 8, 9, 13, 14 and 17 under 35 U.S.C. §102(b) as being anticipated by Fujimiya, Applicant asserts that Fujimiya fails to teach or suggest each and every element of the claims as amended. Fujimiya discloses a gene database retrieval system that retrieves a gene sequence having a sequence similar to a sequence similar to sequence data from a gene database. Further Fujimiya discloses a determination of a degree of similarity between target data and key data. However, Fujimiya fails to disclose the evaluation of a binding possibility of target nucleotide sequence data and complementary sequence data in descending order of edit distance of binding precision to determine a binding possibility of a probe nucleotide sequence to a target nucleotide sequence, as recited in independent claims 1, 8, 13 and 17. Further, Fujimiya fails to disclose the storing of a maximum acceptable edit distance of binding precision between a target nucleotide sequence and a probe nucleotide sequence, as recited in independent claims 8, 13 and 17. Support for this amendment can be found on page 4, line 17 through page 5, line 17 of the Specification. Dependent claims 2, 3, 9 and 14 are patentable at least by virtue of their dependency from independent claims 1, 8 and 13 and also recite patentable subject matter in their own right. Accordingly, withdrawal of the rejection of claims 1-3, 8, 9, 13, 14 and 17 under 35 U.S.C. §102(b) is therefore respectfully requested.

In view of the above, Applicant believes that claims 1-19 are in condition for allowance, and respectfully request withdrawal of the §101, §112 and §102(b) rejections.

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Respectfully submitted,

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